



United States
Department of
Agriculture

Forest
Service

Arizona Zone
Entomology and
Pathology

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Route To:

Subject: Functional Assistance

To: Area Director
Bureau of Indian Affairs
Phoenix Area Office
P.O. Box 10
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On November 13, Arizona Zone Office entomologists Jill Wilson and Bobbe Fitzgibbon field checked one of several areas of spruce and fir defoliation detected in 1998 at high elevation above the Sunrise Ski Area on Fort Apache originally thought to have been caused by spruce aphid. Maury Williams of your staff assisted them. Upon ground checking the site, the defoliation was clearly due to the feeding of geometrid (Lepidoptera, Geometridae, a family of moths often called loopers or inchworms) larvae and not spruce aphid. Severe defoliation of tree tops was noted. Upper canopy defoliation does not fit the feeding pattern of the spruce aphid. Additionally, webbing and numerous caterpillars were present on the trees. The insect appears to be the same species that is currently defoliating spruce and fir at high elevations on Mt. Graham on the Coronado National forest. This little known insect, *Nepytia janetae*, was originally described from Catron Co., NM and had been seen feeding in the White Mountains of Arizona, causing little damage. A number of the larvae were collected and are being reared to adulthood in the laboratory at our office. Final identification to species will be made on adult specimens.

The acreage of spruce aphid defoliation reported in the October 5, 1998 letter from this office has been adjusted to 172 acres with 1013 acres now being attributed to the geometrid. The changes were made based on the location of the defoliation in spruce fir forest type, some ground truthing, and the historic locations of the spruce aphid populations.

If you have any questions please feel free to call Bobbe Fitzgibbon at 520-556-2072.

Borys M. Tkacz

Arizona Zone Leader

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